



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

AGENDA: 4

Update on Petroleum Refining Emissions Tracking Rule

**Board of Directors
Stationary Source Committee
July 21, 2014**

**Eric Stevenson
Director of Technical Services**

A background image of a lush forest with tall trees and green ferns in the foreground.

Rule Development Process

- Process started in 2012 with a Regulatory Concept paper and the “Work Plan for Action Items Related to Accidental Releases from Industrial Facilities”
- First draft of the rule released in March of 2013
- In April of 2013, public workshops held (Martinez, Richmond, District office – webcast)
- Meeting with interested parties throughout the process
- Goal: Complete the rule by the end of 2014



Proposed Rule Elements

- Report on-going ***annual emissions inventories*** of all regulated air pollutants based on upgraded methods, including emissions from cargo carriers
- Establish ***Petroleum Refinery Emissions Profile (PREP)***, and require that on-going inventories include comparisons with PREP
- Report on-going ***crude oil quality characteristics*** with annual emissions inventories (e.g. sulfur, nitrogen content, API gravity, Total Acid Number)



Proposed Rule Elements (continued)

- Update refinery-wide ***Health Risk Assessments (HRA)*** with enhanced emissions inventories and revised OEHHA HRA guidelines – Due by March 2016
- ***Enhance fence line systems and establish community air quality monitoring systems*** - Plan by the end of 2015 with fence line monitoring one year and community monitoring two years after plan approval
- ***Develop fee structure*** to recover costs

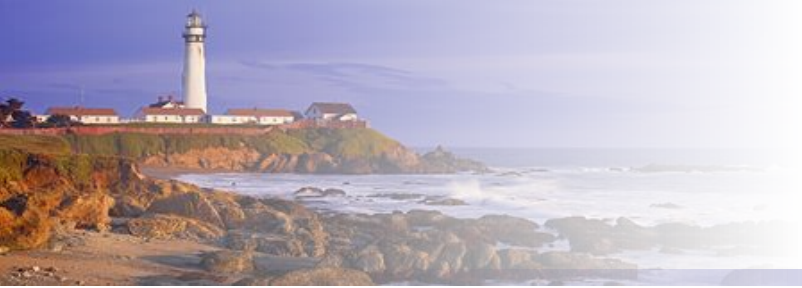


Proposed Timelines

- First emissions inventory – based on 2015 data, due by September 2016
- First PREP – Established based on 2015, 2016 and 2017 data, due by September 2018
- Report crude quality – Quarterly basis, submitted annually, due September 2016
- HRAs – due by March 2016
- Fence line systems and community air quality monitoring systems - Plan by the end of 2015; install fence line monitoring within one year and community monitoring within two years of plan approval

Proposed Timelines

Task Name	2015				2016				2017				2018				2019				2020				2021			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Emissions Inventory	Emissions Inventory																											
Collect Emissions Inventory Information					Collect Emissions Inventory Information																							
Compile Emissions Inventory					Compile Emissions Inventory																							
Submit 2016 Emissions Inventory									Submit 2016 Emissions Inventory																			
Submit 2016 Emissions Inventory													Submit 2016 Emissions Inventory															
Submit 2017 Emissions Inventory																	Submit 2017 Emissions Inventory											
Submit 2018 Emissions Inventory																					Submit 2018 Emissions Inventory							
Develop Petroleum Refinery Emissions Profile (PREP)	Develop Petroleum Refinery Emissions Profile (PREP)																											
Collect Emissions Inventories	Collect Emissions Inventories												Collect Emissions Inventories															
Submit PREP													Submit PREP															
Crude Quality	Crude Quality																											
Collect 2016 Crude Quality Information					Collect 2016 Crude Quality Information																							
Compile 2016 Crude Quality Information					Compile 2016 Crude Quality Information																							
Submit 2016 Crude Quality Report									Submit 2016 Crude Quality Report																			
Submit 2016 Crude Quality Report													Submit 2016 Crude Quality Report															
Submit 2017 Crude Quality Report																					Submit 2017 Crude Quality Report							
Submit 2018 Crude Quality Report																									Submit 2018 Crude Quality Report			
Health Risk Assessment (HRA)	Health Risk Assessment (HRA)																											
Develop HRA Based on 2014 Data					Develop HRA Based on 2014 Data																							
Submit HRA					Submit HRA																							
Air Monitoring	Air Monitoring																											
Develop Air Monitoring Plan					Develop Air Monitoring Plan																							
Submit Air Monitoring Plan					Submit Air Monitoring Plan																							
Air District Review of Air Monitoring Plan					Air District Review of Air Monitoring Plan																							
Public Comment					Public Comment																							
Additional Air District Review of Comments					Additional Air District Review of Comments																							
Fence Line Systems Become Operational					Fence Line Systems Become Operational																							
Fence Line Data Available to Public									Fence Line Data Available to Public																			
Community Monitoring Becomes Operational					Community Monitoring Becomes Operational																							
Community Monitoring Data Available to the Public									Community Monitoring Data Available to the Public																			



Rationale for Revised Approach

- Legal issues with cap
 - The Board may not be able to make required finding of “necessity”
 - The Board may not be able to make necessary finding of “cost effectiveness”
 - Capping only refinery emissions may be problematic
 - May not be consistent with existing state and federal permitting programs
 - May involve “vested rights” issues resulting in “regulatory taking”
- Operational issues with cap
 - Difficult to define emissions from area and fugitive sources
 - Gathered information will inform most effective ways to reduce emissions



Opportunities

- Source category controls provide a more straight forward approach, e.g.
 - Investigate Fluidized Catalytic Cracking Unit (FCCU) and other sources to further address particulate matter emissions
- Air monitoring, HRA and other data provides a means to determine impacts within the immediate communities and throughout the Bay Area
 - Information gathered from monitoring will lead to additional rules and/or rule amendments



Next Steps

- Continue discussions with stakeholders
- Finalize emissions inventory and air monitoring guidelines
- Hold another set of Public Workshops (Benicia, Richmond, Martinez and Air District office)
- Complete analysis of socioeconomic and environmental impacts
- Complete staff report
- Hold public hearing for consideration of adoption